IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JU-HEON LEE

Serial No.:	09/685,138	Examiner:	HUYNH, KIM NGOC
Filed:	11 October 2000	Art Unit:	2182
For:	PORTABLE INTEGRATED CIRCUIT MEMORY DEVICE FOR USE WITH UNIVERSAL SERIAL BUS		

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references. Under 37 C.F.R. §1.98(a)(2) however, copies of U.S. patent reference(s) are not provided.

REFERENCES CITED:

1. References cited by Chinese Intellectual Property Office during examination of corresponding Chinese patent application **CN00124847.2**.

   - Chinese Patent Publication No. CN1201235A to Ohaya *et al.*, entitled EXTERNAL STORAGE APPARATUS, published on 9 December 1998;

   - Chinese Patent Publication No. CN1197249A to He *et al.*, entitled A DEVICE AND METHOD FOR KEEPING SAFE AND SECRET BY USING A COMPUTER SIGNATURE, published on 28 October 1998;

   - Chinese Patent Publication No. CN1111886A to Kivari, entitled METHOD AND APPARATUS FOR OPERATING A RADIOTELEPHONE IN AN

EXTENDED STAND-BY MODE OF OPERATION FOR CONSERVING BATTERY POWER, published on 15 November 1995;

- Chinese Patent Publication No. CN1204901A to Inoue *et al.*, entitled A RECEIVING APPARATUS WITH AN INTERMITTENT RECEIVING MODE, published on 13 January 1999;

- Chinese Patent Publication No. CN2032364U to Wei, entitled *A SAFE PLUG HAVING TWO USAGES AND FOUR PROTECTIONS AGAINST ELECTRIC SHOCK, EXPLOSION, CORROSION AND DAMAGE*, published on 8 February 1989;

- "USB SYSTEM ARCHITECTURE", MindShare, Inc., Don Anderson, first printed in January 1997;

- 1st Office action issued by Chinese Intellectual Property Office, issued on 9 January 2004;

- 2nd Office action issued by Chinese Intellectual Property Office, issued on 9 July 2004;

- 3rd Office action issued by Chinese Intellectual Property Office, issued on 5 November 2004;

- 4th Office action issued by Chinese Intellectual Property Office, issued on 18 February 2005;

- Decision of Rejection issued by Chinese Intellectual Property Office, issued on 21 October 2005.

2.   References cited by Chinese Intellectual Property Office during examination of corresponding Chinese application **CN200410011888.5**.

- Chinese Patent Publication No. CN1219823A to Gao *et al.*, entitled *UNIVERSAL NUMERIC STATELLITE TELEVISION CONDITION RECEIVING SYSTEM AND ITS REALIZATION METHOD*, published on 16

June 1999;

- 1st Office action issued by Chinese Intellectual Property Office, issued on 9 December 2005.

3. References cited during **Opposition No. 89119724P01** filed by Mr. Winston Hsu in Taiwan Intellectual Property Office.

    - Evidence I: "Trek 2000 International Launches Revolutionary 'Thumb Drive' At CeBIT 2000; Revolutionary New Device a Cableless, "Plug-and-play' Solution to Personal, On-the-Go Memory Storage", Business Wire, published on 25 February 2000;

    - Evidence II: "Trek Thumb Drive USB: Plug-in Solid-state Storage" by Stephen Jones, published on 20 April 2000;

    - Exhibit III: "Make Way For the Trek ThumbDrive" by Archive PceXtremist.com, published on 25 April 2000;

    - Evidence IV: "Hot insertion, hot swapping" from www.cnpedia.com, published on 20 March 2000;

    - Evidence V: "ThumbDrive: More files on a smaller footpad boosts security" Nicky Blackburn, published on 23 July 2000;

    - Evidence VI: "thumbdrive", by Neil Davidson, published on 16 June 2000;

    - Evidence VII: Taiwan Patent Publication No. 397271, published on 1 July 2000 (English abstract is not attached).

4. References cited during **Opposition No. 089119724P02** by Trek Technology Pte Ltd., in Taiwan Intellectual Property Office.

    - Evidence I: Chinese Patent Publication No. 473662, published on 21 January 2002 (English abstract is not attached);

- Evidence II: PCT Patent Publication No. WO 01/61692 to Cheng, entitled A PORTABLE DATA STORAGE DEVICE, published on 23 August 2001 (as the related reference);

- Evidence III-1: "ThumbDrive" by ARMAS Computer Corpo, published in June 2000;

- Evidence III-4: "ThumbDrive" published on May 2000;

- Evidence III-5: "ThumbDrive" by PC Office, published on 1 September 2000;

- Evidence IV: "ThumbDrive" by ASCII EXPRESS on June 2000;

- Evidence V: "ThumbDrive" by NIKKEI Byte, published in June 2000;

- The English Translation of the Official Letter of Opposition dated 27 May 2002.

5. References cited during **Opposition No. 089119724P03** by M-System Flash Disc Pioneers, Ltd., in Taiwan Intellectual Property Office.

- Evidence I: "USB Special – The Key to Software and Security", Aladdin Knowledge Systems, Ltd., published on September 1998;

- Evidence II: "MachASP USB – Software Protection via the USB", Aladdin Knowledge Systems, Ltd., published on October 1998;

- Evidence III: U.S. Patent No. 5,928, 347 to Jones, entitled UNIVERSAL MEMORY CARD INTERFACE APPARATUS, issued on 27 July 1999;

- Evidence IV: U.S. Patent No. 6,012,103 to Sartore *et al.*, entitled BUS INTERFACE SYSTEM AND METHOD, issued on 4 January 2000;

- Evidence V: "Universal Bus Mass Storage Class Specification Overview", by Microsoft Corp., published on 22 October 1998;

- Evidence VI: EP Patent Publication No. EP0929043 to Terasaki *et al.*, entitled PC CARD HAVING TWO INTERFACES, published on 14 July

1999;

- Evidence VII: Chinese Patent Publication No. CN1201235A to Ohaya *et al.*, entitled EXTERNAL STORAGE APPARATUS, published on 9 December 1998;

- Evidence VIII: PCT Publication No. WO 00/07088 to Rallis, entitled NOTEBOOD SECURITY SYSTEM (NBS), published on 10 February 2000;

- Evidence IX: Taiwanese Patent Application No. TW08912056396 by M-SYSTEM FLASH DISK PIONEERS, Ltd., entitled ARCHITECTURE FOR A UNIVERSAL SERIAL BUS-BASED PC FLASH DISK, filed on 31 March 2000 (corresponding to U.S. 6,148,354);

- The English Translation of the Official Letter of Opposition and the reasons provided in the Opposition;

- The English translation of the Official Letter of Opposition dated 28 May 2002.

DISCUSSION

As written in the Office action issued by the First Patent Office of the People's Republic of China on the 9th of January 2004 in applicant's corresponding Chinese Patent Application (00124847.2) corresponding to applicant's above-captioned U.S. Patent Application, **Ohaya** *et al.*'CN235 discloses that the present invention enables connection and a high-speed access to a plurality of electronic apparatuses having different types of built-in interfaces. The present invention provides an external storage apparatus comprising: storage means 22; an interface controller A21 and an interface controller B24, each having a different type of built-in interface control block for carrying out a data writing and/or reading into/from the storage means 22; and connection means 26 for selecting and connecting one of the interface controller A21 and the interface controller B24 to

the electronic apparatus. It is preferable that the connection means 26 be constructed so as to select one of the interface controller A21 and the interface controller B24 according to a control instruction from the electronic apparatus.

He *et al.* 'CN249 discloses that the present invention is a device and method for keeping safe and secret by using a computer signature, characterized in that a judge converter is arranged on a processor and a contact-controlled input device and a display device are connected to the processor. On authentication, the signature input to the processor via the contact-controlled input device is converted by the judge converter, then stored in a RAM, and finally compared with the original signature stored on hard disk of a notebook computer to determine if it is a legal user, and thereby achieving the object of keeping safe and secret.

Anderson discloses that design goals: low cost solution for both system and peripheral implementations; enhanced performance capability; support for attaching new peripheral designs; support for legacy hard ware and software; and low power implementation. The article also discusses that USB Transactions, USB Cable Power Distribution, USB Power Conservation, Hub Configuration, Device Requests, USB Host Software and Device Classes.

As written in the Second Office action issued by the Patent Office of the People's Republic of China on the 9th of July 2004 in applicant's corresponding Chinese Patent Application (00124847.2) corresponding to applicant's above-captioned U.S. Patent Application, **Kivari'CN886** discloses that a method for reducing the power consumption of a radiotelephone and an apparatus for performing the method. The method comprises the steps of (a) receiving with a receiver of a radiotelephone at least a Word Synchronization pattern from a frame that is transmitted over a control channel; (b) receiving a first repeat of a control message that follows the Word Synchronization pattern within the frame; and (c) determining if the first repeat was correctly

received. If the first repeat was correctly received, the method further comprises a step of (d) determining if at least one reeption-related criteria is met. If the reception-related criteria is determined to be met, the method further comprises a step of (e) removing operating power from one or more portions of the radiotelephone receiver for a predetermined time period during a remainder of the frame. The reception-related criteria is a Message Error Rate (MER), and may also include a difference between a minimum Received Signal Strength Indicator (RSSI) value and a maximum RSSI value that are detected during a predetermined interval of time.

Inoue *et al.*'901 discloses that a receiving apparatus for receiving a TDMA signal is disclosed with an intermittent receiving mode. The receiving apparatus receives a frequency reference signal to control a voltage controlled oscillator for generating a system clock and receives a TDMA synchronizing signal to control the phase of a TDMA timing signal to establish the reference frequency synchronization and the TDMA synchronization. To reduce power consumption in the sleep interval during the intermittent receiving, a supply power to a D/A converter is stopped, the D/A converter is fed-in frequency control data and supplies a frequency control voltage to the voltage controlled oscillator. Just before an intermittent receiving interval, that is, the end of the sleep mode, the power to the D/A converter is supplied and the TDMA timing is compensated by calculating the sleeping interval and the frequency of the self-oscillation of the voltage controlled oscillator. The TDMA timing may be not compensated but receives the TDMA synchronizing signal to control the TDMA synchronizing if the phase difference in the TDMA timing is within the range of the correlator. The frequency reference signal may be received to compensate the frequency and phase of the system clock and the TDMA synchronizing timing may be compensated by calculating the sleeping interval and the frequency of the self-oscillation of the voltage controlled oscillator.

As written in the Fourth Office action issued by the Patent Office of the People's Republic of China on the 18th of February 2005 in applicant's corresponding Chinese Patent Application (00124847.2) corresponding to applicant's above-captioned U.S. Patent Application, **Wei'CN364,**

discloses that a safe plug having two usages and four protections against electric shock, explosion, corrosion and damage, characterized in that: (1) being a sealed structure that is contacted in different sections at several times, having four protections against electric shock, explosion, corrosion and damage; (2) the plug is integrated with a switch such that it is convenient fro use; (3) having characteristics of color sense, sound sense and touch sense such that it is safe for the older, children, the blind and the simpleton; (4) having a self-lock mechanism such that it has good conductivity and is hard to be loosend; (5) when plurality of plugs are used in a multi-purpose socket, any one of appliances to which the plugs are connected can be powered on and off without pulling out the plugs such that the appliances are safe and reliable; (6) capable of being engaged with the existing sockets.

As written in the Office action issued by the Patent Office of the People's Republic of China on the 9th of December 2005 in applicant's corresponding Chinese Patent Application (200410011188.5) corresponding to applicant's above-captioned U.S. Patent Application, **Gao** *et al.* **'CN823** discloses that a universal receiver system for digitalized satellite television is composed of microprocessor, program,data storage, video and audio decoder, tuner and interface for external movable storage medium. The special program information in MPEG-2 and the service information in DVB are used to compare with the program information on external movable storage medium to determine if the program is allowed to receive. Different priorities can be set up for different users.

Opposition No. 89119724P01("P01") discloses that in the "P01" Opposition, seven pieces of evidence are cited for such opposition. In summary, according to the opposing party, all features of claims 1~10 of the application are anticipated and obvious by the seven cited evidences.

Opposition No. 89119724P02("P02") discloses that in the "P02" Opposition, a specification of a pending patent application filed on April 2000, serial no. 29106162, by the opposing party Trek Technology Ltd. Is provided for evidence, which is a corresponding application of PCT/SG00/00029

and filed before the application (Evidence II). Several articles related to introducing portable memory devices using a USB interface were cited against the novelty of the present application (Evidences III-1 ~ III-6, V and VI). Most of them are discussed about the "ThumbDrive" product sold by Trek Technology Ltd., who is the opposing party; and a corresponding sample product of "ThumbDrive" is also provided for evidence (Evidence IV, temporary stored in Taiwan IPO).

In summary, according to the opposing party, all features of claim 1 of the application are disclosed and anticipated by the 89106162 pending application (Evidence II). The apparatus of the application is the same as the apparatus disclosed in Evidence II and is not novel. In addition, the product manufactured in accordance with the technology disclosed in the pending application (Evidence II) is publicly disclosed and the earliest date the products were sold in the market was around May or June 2000 (as discussed in articles of Evidences III-1 ~ III-6), which is publicly used before the filing date of the application.

In addition, according to the opposing party, the nonvolatile semiconductor memory of claim 2 is disclosed in the 89106162 pending application (Evidence II) the article (Evidence V). The digital camera, digital video camera and electronic calculator of claim 3 are disclosed in pending application (Evidence II) as well as the article (Evidence VI). The portable memory device of claim 4 is disclosed in the pending application (Evidence II) and the article (Evidence V).

The feature of claim 5 is well known in the USB specification and its standard application. The feature is also disclosed in the pending application (Evidence II). The article (Evidence VI) also disclosed the product in accordance with Evidence II can be connected to Personal Computer and is easily identified when the PC is powered on, which is the Plug and Play function.

The feature of claim 6 is disclosed in the pending application (Evidence II), in which a memory device storing a security information is disclosed. In addition, the article (Evidence VI) also disclosed that a security confirmation function can be added in the product in accordance with Evidence II, for preventing stored information from being stolen when the device is missed.

The features of claims 7 and 8 are disclosed in the pending application (Evidence II), in which the data processing system storing a security information to verify an authorized user is disclosed. The data processing system starts to work when the security information stored therein is matched with the security information of the memory device.
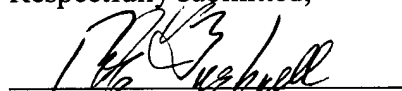
The housing comprising a hole for a key ring of claim 9 is well known in the art and is also disclosed in Evidence II ~ IV. The connector cover of the memory device of claim 10 is also well known in the art because providing a cover for protecting the connector from damage is easily found. In addition, as in the sample product (Evidence IV) and the articles of Evidences V and VI, a cover for protection is also provided.

Opposition No. 89119724P03("P03") provides eight pieces of evidence for such opposition. In summary, according to the opposing party, all features of claims 1~10 of the application are disclosed and anticipated by the eight cited evidences. The apparatus of the application is the same as the apparatus disclosed in these evidences.

Pursuant to 37 C.F.R. §1.97(c)(2), the fee set forth under 37 C.F.R.§1.17(p) of $180.00 accompanies this Information Disclosure Statement. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

Respectfully submitted,

Robert E. Bushnell
Reg. No.: 27,774
Attorney for the Applicant

1522 "K" Street, N.W., Suite 300
Washington, D.C. 20005
Area Code: (202) 408-9040

Folio: P56181
Date: 3/28/06
I.D.: REB/fw/ny

INFORMATION DISCLOSURE STATEMENT

PTO-1449 (PAGE 1 OF 1)

SERIAL NUMBER	09/685,138
DOCKET NO.	P56181
APPLICANT	JU-HEON LEE
FILING DATE	11 October 2000
GROUP	2182

U.S. PATENT DOCUMENTS

EXAMINER	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
-	5,928,347	07/99	*Jones*			
	6,012,103	01/00	*Sartore et al.*			

FOREIGN PATENT DOCUMENTS / TRANSLATION

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
	CN1201235A	12/98	CHINA			Abstract	
	CN1197249A	03/98	CHINA			Abstract	
	CN1111886A	12/94	CHINA			Abstract	
	CN1204901A	07/98	CHINA			Abstract	
	CN2032364U	02/89	CHINA			Abstract	
	CN1219823A	06/99	CHINA			Abstract	
	TW 397271	07/00	TAIWAN				
	CN 473662	01/02	CHINA				
	WO 01/61692	08/01	WIPO			Abstract	
	EP 0929043	07/99	EUROPE			Abstract	
	WO 00/07088	02/00	WIPO			Abstract	
	TW 08912056396	03/00	TAIWAN			Abstract	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	"USB SYSTEM ARCHITECTURE", MindShare, Inc., Don Anderson, first printed in January 1997
	1st Office action issued by Chinese Intellectual Property Office, issued on 9 January 2004
	2nd Office action issued by Chinese Intellectual Property Office, issued on 9 July 2004
	3rd Office action issued by Chinese Intellectual Property Office, issued on 5 November 2004
	4th Office action issued by Chinese Intellectual Property Office, issued on 18 February 2005
	Decision of Rejection issued by Chinese Intellectual Property Office, issued on 21 October 2005

	1st Office action issued by Chinese Intellectual Property Office, issued on 9 December 2005
	Evidence I: "Trek 2000 International Launches Revolutionary 'Thumb Drive' At CeBIT 2000; Revolutionary New Device a Cableless, "Plug-and-play' Solution to Personal, On-the-Go Memory Storage", Business Wire, published on 25 February 2000 (cited during Opposition No. 89119724P01)
	Evidence II: "Trek Thumb Drive USB: Plug-in Solid-state Storage" by Stephen Jones, published on 20 April 2000 (cited during Opposition No. 89119724P01)
	Exhibit III: "Make Way For the Trek ThumbDrive" by Archive PceXtremist.com, published on 25 April 2000 (cited during Opposition No. 89119724P01)
	Evidence IV: "Hot insertion, hot swapping" from www.cnpedia.com, published on 20 March 2000 (cited during Opposition No. 89119724P01)
	Evidence V: "ThumbDrive: More files on a smaller footpad boosts security" Nicky Blackburn, published on 16 July 2000 (cited during Opposition No. 89119724P01)
	Evidence VI: "thumbdrive", by Neil Davidson, published on 16 June 2000 (cited during Opposition No. 89119724P01)
	Evidence III-1: "ThumbDrive" by ARMAS Computer Corpo, published in June 2000 (cited during Opposition No. 89119724P02)
	Evidence III-4: "ThumbDrive" published on May 2000 (cited during Opposition No. 89119724P02)
	Evidence III-5: "ThumbDrive" by PC Office, published on 1 September 2000 (cited during Opposition No. 89119724P02)
	Evidence IV: "ThumbDrive" by ASCII EXPRESS on June 2000 (cited during Opposition No. 89119724P02)
	Evidence V: "ThumbDrive" by NIKKEI Byte, published in June 2000 (cited during Opposition No. 89119724P02)
	The English Translation of the Official Letter of Opposition dated 27 May 2002.
	Evidence I: "USB Special – The Key to Software and Security", Aladdin Knowledge Systems, Ltd., published on September 1998 (cited during Opposition No. 89119724P03)
	Evidence II: "MachASP USB – Software Protection via the USB", Aladdin Knowledge Systems, Ltd., published on October 1998 (cited during Opposition No. 89119724P03)
	Evidence V: "Universal Bus Mass Storage Class Specification Overview", by Microsoft Corp., published on 22 October 1998 (cited during Opposition No. 89119724P03)
	The English Translation of the Official Letter of Opposition and the reasons provided in the Opposition
	The English translation of the Official Letter of Opposition dated 28 May 2002.

EXAMINER:	DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.